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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/978,432 Filing Date: October 15, 2001 Appellant(s): YASEEN ET AL.

OCT 19 2007

Technology Center 2100

Marc A. Hubbard
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 10, 2007 appealing from the Office action mailed June 13, 2005.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences, which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments

The statement of the status of the Amendment contained in the brief is correct.

(5) Summary of claimed subject matter

The summary of the claimed subject matter is contained in the brief is correct.

(6) Grounds of Rejection to be reviewed on appeal

The following ground(s) of rejection are applicable to the appealed claims:

- (i) Claims 1-15 1-3, 5-10 & 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Dharanikota et al (U.S. Pub No. 2002/0107908).
- (ii) Dependent claims 4, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dharanikota et al (U.S. Pub No. 2002/0107908) and Kodialam et al (U.S. Pub No. 2002/0018264A1).

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(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2002/0107908 A1	Dharanikota et al.	08-2002
2002/0018264 A1	Kodialam et al.	08-2004

(9) Grounds of Rejection

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3, 5-10 & 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Dharanikota et al (U.S. Pub No. 2002/0107908).
- 3. As per claims 1 & 9 Dharanikota disclosed a method of transmitting packet-switched data in a network having a plurality of nodes therein (Page.3, paragraph.27 & 28), the method comprising the steps of: defining an ingress rate restriction for each of at least two nodes of the plurality of nodes, the ingress rate restriction limiting the

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amount of data that may be transmitted from the respective node on at least one channel of the network; defining an egress rate restriction for each of the at least two nodes of the plurality of nodes, the egress rate restriction limiting the amount of data that may be transmitted to the respective node on the at least one channel of the network (page.1, paragraph.12); monitoring the amount of data transmitted from and to a first node (page. 6, paragraph 54); and disallowing at least a portion of one of an attempted data transfer from and to the first node when one of the respective ingress rate restriction and egress rate restriction would be violated by the attempted data transfer (page. 6, paragraph 59).

- 4. As per claims 2 & 10 Dharanikota disclosed the network according to claim 1, wherein the network is the Internet (page.3, paragraph.27).
- 5. As per claims 5 & 13 Dharanikota disclosed the network according to claim 1, wherein the at least one egress rate restriction includes a egress committed rate defining a minimum transfer rate reserved in the network for transfers to the respective node and an egress peak rate defining a maximum transfer rate allowable in the network for transfers to the respective node, and the at least one ingress rate restriction includes an ingress committed rate defining a minimum transfer rate reserved in the network for transfers from the respective node and an ingress peak rate defining a maximum transfer rate allowable in the network for transfers from the respective node (page.2, paragraph.12, page.3, paragraphs.28 & 35).

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6. As per claims 6 & 14 Dharanikota disclosed the network according to claim 1, wherein the at least one communication channel is a point-to-point communication channel (page.2, paragraphs.12 & 13).

- 7. As per claims 7 & 15 Dharanikota disclosed the network according to claim 1, wherein the at least one communication channel is a point- to-multipoint communication channel (page.2, paragraph.12).
- 8. As per claim 8 Dharanikota disclosed the network according to claim 1, wherein an allowed transmission from the first node to the second node includes either the requested transmission or a portion thereof the management node monitoring transmission from the first node to the second node (page.2, paragraphs.12 & 13).

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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10. Claims 3, 4, 11 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dharanikota et al (U.S. Pub No. 2002/0107908) and Kodialam et al (U.S. Pub No. 2002/0018264A1).

11. As per claims 3, 4, 11 & 12 Dharanikota disclosed the network according to claim 1 (page.1, paragraph. 12, page.3, paragraph 27). However Dharanikota did not explicitly describe, wherein the first node and the second node are optical transport network nodes and at least one communication channel is a fiber optic link.

Kodialam disclosed wherein the first node and the second node are optical transport network nodes and at least one communication channel is a fiber optic link (page.2, paragraph. 22).

It would have been obvious to one in the ordinary skill in the art to include fiber optic networks described by Kodialam in the category of networks mentioned by Dharanikota since fiber optic networks namely ATM, support services involving voice, video and data to make the network more robust.

(10) Response to Arguments

(A) Rejection of claims 1-3, 5-10 and 13-15 Under 102(e).

Issue 1: Appellant on second paragraph of page 10 argued with respect to claim 1 that Dharanika only describes "a network element (e.g. an edge router, core router, or transit router, collectively, a routing element)…" and paragraph.59 describes using counters on egress and ingress TLKs of a single element.

As to appellant's argument Dharanika on page.3, paragraph 28 states the following:

[0028] A plurality of DiffServ-capable network elements or nodes (e.g., edge routers 104A-104E and transit routers 106A-106D) form the trusted domain of the AS network 102, which is capable of instituting a range of SLAs with one or more of its subscribers including dial-up, corporate, wholesale, or peer network customers. These SLAs may be simple standard service contracts for mass consumers or customized and multidimensional service agreements for business and corporate customers. An SLA, which defines end-to-end service specifications, may comprise any of the following components in the context of the present invention: (i) service availability; (ii) service levels offered; (iii) service guarantees; (iv) responsibilities; (v) service auditing; and (vi) pricing arrangements.

The above excerpt clearly discloses plurality of network elements or nodes capable of instituting (i.e. enforcing) a range of Service Level Agreements (SLA). Dharanika further states that SLA defines the end-to-end (I.E. from a source node to a destination nodes in a network) service specification, which may comprise of service availability, service levels offered, service guarantee etc. Therefore Dharanika clearly discloses plurality of elements having the capability of policing the data traffic.

Issue 2: Appellant on third paragraph of page 10 argued that claim 1 is directed to two nodes, with a third management node that disallows data flow across a communication channels between the two nodes.

As to appellant's argument the examiner again cites Paragraph.28

[0028] A plurality of DiffServ-capable network elements or nodes (e.g., edge routers 104A-104E and transit routers 106A-106D) form the trusted domain of the AS network 102, which is capable of instituting a range of SLAs with one or more of its subscribers including dial-up, corporate, wholesale, or peer network customers. These SLAs may be simple standard service contracts for mass consumers or customized and multidimensional service agreements for business and corporate customers. An SLA, which defines end-to-end service specifications, may comprise any of the following components in the context of the present invention: (i) service availability; (ii) service levels offered; (iii) service guarantees; (iv) responsibilities; (v) service auditing; and (vi) pricing arrangements.

From the above paragraph it should be apparent that Dharanika's <u>Diffserv-capable</u>

<u>network elements</u> or nodes are <u>in fact</u> the <u>management nodes on the network that are</u>

<u>capable of instituting the Service Level Agreements</u> (SLA) with <u>one or more</u> of its

subscribers (I.E. end users). Additionally since Dharanika disclosed that the element is

interacting with other elements on a network therefore the presence of a communication channel is apparent to make that interaction possible.

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To further elaborate the data management aspect of the network element Dharanika further states:

[0031] FIG. 2 depicts a functional block diagram of an exemplary network element 200 provided in accordance with the teachings of the present invention for operating in a trusted domain such as the AS network 102 described hereinabove. The network element 200 is preferably com-

prised of a plurality of termination line cards (TLKs), e.g., TLK 202A and TLK 202B, and a plurality of real time server (RTS) boards 210, wherein the TLK cards and RTS boards are interconnected through a switching fabric 204. In the presently preferred exemplary embodiment of the present invention, the switching fabric 204 is provided as a Multi-Path Self Routing (MPSR) switch that is capable of supporting a plurality of virtual ingress/egress pipes (VIEPs) used for transporting traffic flows through the network element.

[0032] In addition to the internal communication pathways established through the MPSR switch fabric 204 (which is preferably used for all IP load and control traffic), the TLK cards and RTS boards are operable to communicate via an overlay network 220 used for administrative functions such as software downloading, initialization, and management and maintenance configuration. A management server (MS) 218 is accordingly provided as part of the network element 200 for coordinating and hosting these administrative functions.

In paragraphs 31 & 32 Dharanika describes the block diagram of an exemplary network element along with its internal components to include a switch fabric 204 that is capable of supporting a <u>plurality of virtual ingress/egress pipes (VIEPs) used for transporting traffic flows through the network element and for controlling the traffic.</u>

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Issue 3: Appellant on fourth paragraph of page 10 argued with respect to claim 1 that Dharanika makes no mention of setting ingress and egress rate restriction for each of the plurality of nodes connected by at least one communication channel.

As to appellant's argument Dharanika in paragraph.28 discloses <u>Diffserv-capable</u>

<u>network elements</u> or nodes that are <u>in fact</u> the <u>management nodes on the network that</u>

<u>are capable of instituting the Service Level Agreements</u> (SLA) with <u>one or more</u> of its

subscribers (I.E. end users). Dharanika further states that SLA defines the end-to-end

(I.E. from a source node to a destination nodes in a network) service specification,

which may comprise of service availability, <u>service levels offered</u>, <u>service guarantee</u> etc.

To further elaborate and disclose the ingress/egress rate restriction functionality in the network element, Dharanika further states:

[0031] FIG. 2 depicts a functional block diagram of an exemplary network element 200 provided in accordance with the teachings of the present invention for operating in a trusted domain such as the AS network 102 described hereinabove. The network element 200 is preferably com-

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prised of a plurality of termination line cards (TLKs), e.g., TLK 202A and TLK 202B, and a plurality of real time server (RTS) boards 210, wherein the TLK cards and RTS boards are interconnected through a switching fabric 204. In the presently preferred exemplary embodiment of the present invention, the switching fabric 204 is provided as a Multi-Path Self Routing (MPSR) switch that is capable of supporting a plurality of virtual ingress/egress pipes (VIEPs) used for transporting traffic flows through the network element.

[0032] In addition to the internal communication pathways established through the MPSR switch fabric 204 (which is preferably used for all IP load and control traffic), the TLK cards and RTS boards are operable to communicate via an overlay network 220 used for administrative functions such as software downloading, initialization, and management and maintenance configuration. A management server (MS) 218 is accordingly provided as part of the network element 200 for coordinating and hosting these administrative functions.

In paragraphs 31 & 32 Dharanika describes the block diagram of an exemplary network element along with its internal components to include a switch fabric 204 that is capable of supporting a <u>plurality of virtual ingress/egress pipes (VIEPs) used for transporting traffic flows through the network element and for controlling the traffic.</u> Additionally since Dharanika disclosed that the element is interacting with other elements on a network therefore the presence of a communication channel is apparent to make that interaction possible.

Issue 4: Appellant on last line of last paragraph of page 10 argued with respect to dependent claim 8 that Dharanika makes no mention of monitoring data flow between nodes of the a network.

As to appellant's argument Dharanika on page.3, paragraph 28 states the following:

[0028] A plurality of DiffServ-capable network elements or nodes (e.g., edge routers 104A-104E and transit routers 106A-106D) form the trusted domain of the AS network 102, which is capable of instituting a range of SLAs with one or more of its subscribers including dial-up, corporate, wholesale, or peer network customers. These SLAs may be simple standard service contracts for mass consumers or customized and multidimensional service agreements for business and corporate customers. An SLA, which defines end-to-end service specifications, may comprise any of the following components in the context of the present invention: (i) service availability; (ii) service levels offered; (iii) service guarantees; (iv) responsibilities; (v) service auditing; and (vi) pricing arrangements.

The above excerpt clearly discloses plurality of network elements or nodes capable of instituting (i.e. enforcing) a range of Service Level Agreements (SLA). Dharanika further states that SLA defines the end-to-end (I.E. from a source node to a destination nodes in a network) service specification, which may comprise of service availability, <u>service</u> <u>levels offered</u>, <u>service guarantee</u> etc.

It is apparent that <u>in order to implement the Service Level agreement (SLA)</u> on the traffic (voice, data, video) being provided to the customers the <u>management node has to</u>

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monitor the data flowing between the nodes. Therefore Dharanika clearly discloses network elements having the capability of monitoring the data traffic.

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Issue 5: Appellant on first paragraph of page 11 argued that Dharanika makes no mention of disallowing traffic flow on a channel <u>between nodes on a network</u> when an egress rate restriction on one node, or an ingress rate restriction on another node, is violated.

As to appellant's argument Dharanika disclose the ingress/egress rate restriction limitation in the network element, and states:

[0031] FIG. 2 depicts a functional block diagram of an exemplary network element 200 provided in accordance with the teachings of the present invention for operating in a trusted domain such as the AS network 102 described hereinabove. The network element 200 is preferably com-

prised of a plurality of termination line cards (TLKs), e.g., TLK 202A and TLK 202B, and a plurality of real time server (RTS) boards 210, wherein the TLK cards and RTS boards are interconnected through a switching fabric 204. In the presently preferred exemplary embodiment of the present invention, the switching fabric 204 is provided as a Multi-Path Self Routing (MPSR) switch that is capable of supporting a plurality of virtual ingress/egress pipes (VIEPs) used for transporting traffic flows through the network element.

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[0032] In addition to the internal communication pathways established through the MPSR switch fabric 204 (which is preferably used for all IP load and control traffic), the TLK cards and RTS boards are operable to communicate via an overlay network 220 used for administrative functions such as software downloading, initialization, and management and maintenance configuration. A management server (MS) 218 is accordingly provided as part of the network element 200 for coordinating and hosting these administrative functions.

In paragraphs 31 & 32 Dharanika describes the block diagram of an exemplary network element along with its internal components to include a switch fabric 204 that is capable of supporting a <u>plurality of virtual ingress/egress pipes (VIEPs) used for transporting traffic flows through the network element and for controlling the traffic.</u> Additionally since Dharanika disclosed that the element is interacting with other elements on a network therefore the presence of a communication channel is apparent to make that interaction possible.

<u>Issue 6:</u> Appellant on third paragraph of page 11 argued that Dharanika fail to disclose a management node as disclosed by claim 1.

As to appellant's argument Dharanika in paragraph.28 discloses

[0028] A plurality of DiffServ-capable network elements or nodes (e.g., edge routers 104A-104E and transit routers 106A-106D) form the trusted domain of the AS network 102, which is capable of instituting a range of SLAs with one or more of its subscribers including dial-up, corporate, wholesale, or peer network customers. These SLAs may be simple standard service contracts for mass consumers or customized and multidimensional service agreements for business and corporate customers. An SLA, which defines end-to-end service specifications, may comprise any of the following components in the context of the present invention: (i) service availability; (ii) service levels offered; (iii) service guarantees; (iv) responsibilities; (v) service auditing; and (vi) pricing arrangements.

From the above paragraph it is apparent that the Diffserv-capable network elements or nodes are in fact the management nodes on the network that are capable of instituting the Service Level Agreements (SLA) with one or more of its subscribers (I.E. end users). Dharanika further states that SLA defines the end-to-end (I.E. from a source node to a destination nodes in a network) service specification, which may comprise of service availability, service levels offered, service guarantee etc.

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(B) The rejection of claims 5 and 13 Under 102(e)

Issue 1: Appellant argued that Examiner did not adequately address the depended claims 5 & 13 in the final office action and failed to provide a detailed reasoning on how the claim limitations read onto the cited paragraphs.

As to applicant's argument examiner did cite appropriate passages of Dharanika that read on the limitations of the dependent claims. However when reviewing a reference the applicants should remember that not only the specific teachings of a reference but also reasonable inferences which the artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection. In re Preda, 401 F. 2d 825, 159 USPQ 342 (CCPA 1968) and In re Shepard, 319 F. 2d 194, 138 USPQ 148 (CCPA 1963). Skill in the art is presumed. In re Sovish, 769 F. 2d 738, 226 USPQ 771 (Fed. Cir. 1985). Furthermore, artisans must be presumed to know something about the art apart from what the references disclose. In re Jacoby, 309 F. 2d 513, 135 USPQ 317 (CCPA 1962). The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969). Every reference relies to some extent on knowledge of persons skilled in the art to complement that is disclosed therein. In re Bode, 550 F. 2d 656, 193 USPQ 12 (CCPA 1977).

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(C) Rejection of claims 3, 4, 11 & 12 Under 102(e)

Issue1: Appellant states that the rejection of claims 3, 4, 11 and 12 as being obvious in

view of the combination of Dharanika et al and Kodialam et al are premised on the

same erroneous reading of Dharanika et al. as discussed above.

In response to appellant's statement the examiner asserts that the teachings of

Dharanika clearly anticipates applicant's invention. Examiner has addressed all the

allegations made by the applicant in detail against Dharanika above. Kodialam

teachings are similar to Dharanika therefore their combination is appropriate to

anticipate the limitations of dependent claims 3, 4, 11 and 12.

(11) Related proceedings appendix

None.

Respectfully submitted,

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Asghar. Bilgrami Patent Examiner Art Unit 2143

August 31, 2007

Conferees

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